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They beat iron with iron; one was hot and the other was cold; they broke people with people; one was hungry and the other was satiated. Pir Sultan Abdal (1480-1550).

<http://zoobank.org/References/DF68F403-CC01-43AD-B843-BAEB2B0109CA>

## On some Cochylini of Turkey (Lepidoptera, Tortricidae)

Muhabbet Kemal<sup>1</sup> Sibel Kızıldağ Ahmet Ömer Koçak

**Abstract:** On some Cochylini of Turkey (Lepidoptera, Tortricidae). *Misc. Pap.* 211: 1-9, 20 figs. In this paper, some little known species of Cochylini are discussed from various standpoints, and illustrated. New faunistical records are mentioned.  
**Key words:** *Aethes*, *Cochylidia*, *Cochylimorpha*, *Cochylis*, *Fulvoclysis*, *Eugnosta*, *Hysterophora*, *Phtheochroa*, Cochylini, Tortricidae, Turkey, fauna.

Among the little known species of Cochylini in Turkey discussed and mentioned in this paper. *Aethes nefandana* is given from Ankara with its male genitalia. The female of *Aethes pannosana* is illustrated here with the genitalia for the first time. *Cochylidia rupicola* is mentioned from northern Anatolia. Some *Cochylimorpha* species (*blandana*, *punctulatana* and *nomadana*) are discussed from morphological standpoint. *Cochylimorpha kurdistan* is given from Van Province with illustration. But its identity is an open problem, that the answer is not yet known. *Cochylimorpha langeana* seems a variable species but no DNA barcode of this species was available. Therefore, the identity of some populations is also an open problem. *Cochylimorpha straminea* is reported from Mardin Province for the first time. Similarly, *Cochylidia epileneana* is given here from Malatya Province for the first time. Populations of *Fulvoclysis subdolana* in Turkey are discussed morphologically. Probably an undescribed species of *Eugnosta* is mentioned. *Hysterophora maculosana* is reported from Van Province for the first time. Status of some *Phtheochroa* species in Turkey is discussed. New provincial records are mentioned.

All the material used here are identified by the authors and preserved in the Collection of the Cesa.

### 1. *Aethes nefandana* (Kennel, 1899)

(Fig. 1)

Synonymy: *nefandana* Kennel, 1899; *diacrisiana* Rebel, 1903; *chersonana* Obratsov, 1937

Original Reference: *Cochylis nefandana* Kennel, 1899, Dt. ent. Z., Iris 12: 39, Taf. 1 fig. 38. Type ♂: [Türkei: Kayseri Province]: "Kaiserie (Kleinasien)" (ZMB).

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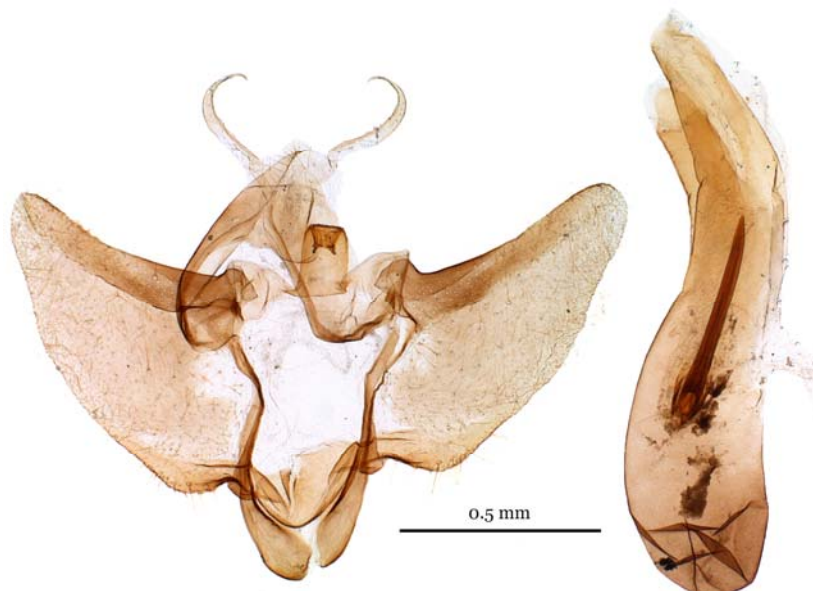
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We hope that this very troubled process, we are experiencing due to the coronavirus pandemic, is over as soon as possible. After this pandemic is finished in the world, we may turn to our normal life and studies.

Range (as code): AT CZ SK HU RO HV MK YU ME Ctn AL BG Vrn GR TR RU MD UA BY KG Uk o3 o6 32 38 o6K o6Kb o6R 38G

Material studied: 1♂ (GP631). Central Turkey, Ankara Province, Çal Dağı 1200m (o6Kb), 25.vi.1983, A.Koçak leg. (Cesa).

Remarks: This species was previously reported by Koçak (1992) from Kızılcahamam (Ankara Prov.). The present record is the second one in the same province.



**Fig. 1** – *Aethes nefandana*. Male genitalia (GP631). Central Turkey, Ankara Province, Çaldağı. A.Koçak,1984 (Cesa).

## 2. *Aethes pannosana* (Kennel,1913)

(Figs. 2, 3)

Synonymy: *pannosana* Kennel,1913; *prunosana* Kennel,1913

Original Reference: *Phalonia pannosana* Kennel,1913, Zoologica 21: 286-287, Taf.13 fig.6 (as *Phalonia prunosana*). Type ♂: [Türkei: Konya Province, Akşehir]: "Anatolien" (BMNH).

Range (as code): TR 34 42 34H 42B

Material studied: 1♀(GP641). NW Turkey: Istanbul Province, Pendik, Kaynarca, 20.vii.1968, A.Koçak leg. (Cesa).

Remarks: This species was transferred by Razowski (1970) to the genus *Aethes*. The single male (type), collected by Korb from Akşehir, was also transferred to British Museum Natural Hist. Museum, London. The female and the genitalia was unknown (Razowski, 1970: 333-334; 2009: 73). Thirty six years ago prepared female genitalia of this species is illustrated here for the first time. This record of the species was the second one after its original description from Akşehir (cf. Koçak & Kemal,2018: 334).

## 3. *Cochylidia rupicola* (Curtis,1834)

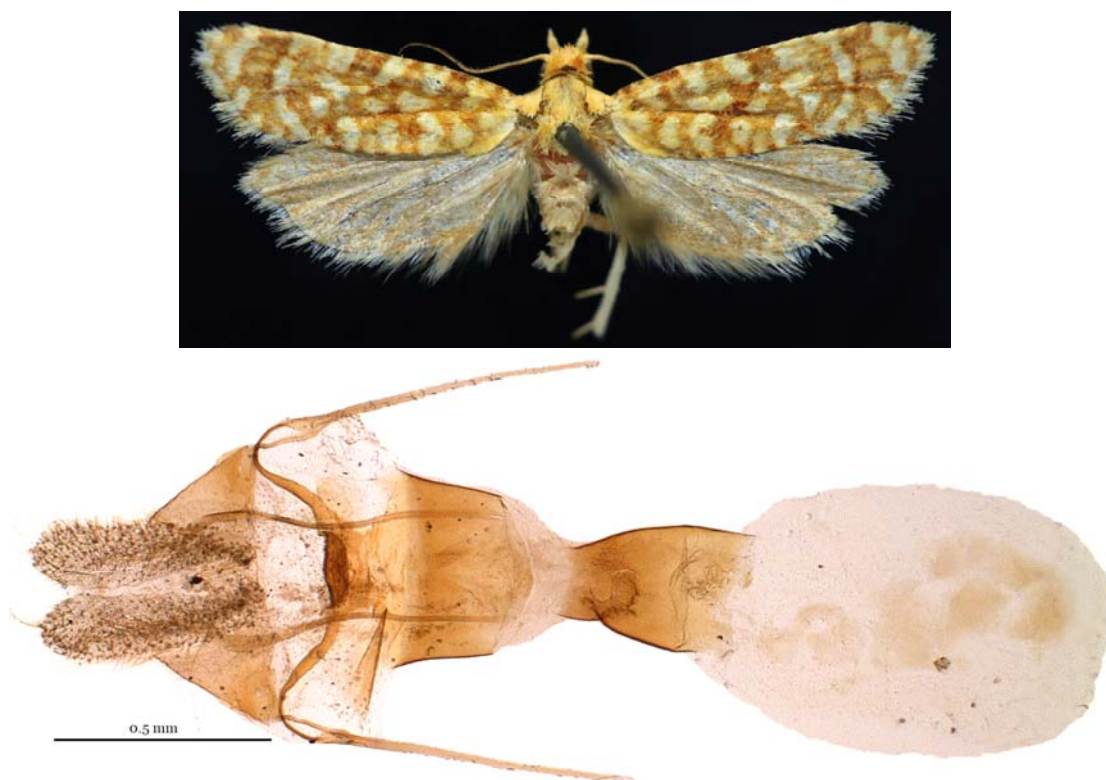
Synonymy: *rupicola* Curtis,1834; *marginana* Stephens,1834; *humidana* Herrich-Schäffer,1851

Original Reference: *Cochylis rupicola* Curtis,1834, Br. Ent. 6: 491. Type: Britain.

Range (as code): ES FR Sa IT IE GB BE NL LU DE CH AT PL CZ SK HU RO YU BG TR LB DK SE FI LV LT RU MD UA IR Mz 14 52 14B 14Bb 52G 52Gb

Material studied: 2♂(GP977). NW Turkey, Bolu Province, Abant 1200m (14Bb), 4.vii.1981, A.Koçak leg. (Cesa).

Remarks: This rare species was only previously listed by the authors (Koçak & Kemal,2009: 235; 2018: 340). It was also reported from Ordu Province Perşembe: Çaytepe (52Gb) (Özdemir & Seven Çalışkan, 2014: 240). Current distribution of this species in Turkey is the northern Region.



**Figs. 2, 3** - *Aethes pannosana*. Upperside of the female and its genitalia (GP641). NW Turkey, Istanbul Province, Pendik. A.Koçak, 1984 (Cesa).

### ***Cochylimorpha* spp.**

There are some discrepancies in the published information among the species *blandana*, *nomadana*, and *punctulatana*. Namely, [1] *Tortrix blandana* was described by Eversmann in 1844 from Urals. Dorsal image of a female of this species, collected from Kazıkoparan [NE Turkey] was given by Razowski (2009). Male genitalia of *blandana* was also illustrated by Razowski (1970, 2009). [2] *Cochylis punctulatana* was described and illustrated by Kennel in 1899.<sup>2</sup> In Kennel's illustration number of dark median points on the upperside of the fore-wing is four. Whereas, in Razowski's (1970) illustration of the type is clearly 3 in number. Moreover, dark marginal dots are found in Razowski's image, whereas Kennel's type has no marginal dots. [3] "*Conchylis nomadana*" was described by Erschoff in 1874 from Turkestan. The type of this species carries also four median dots on fore-wing.

The species *blandana* and *nomadana* were previously reported from Turkey, by various authors.

As to our specimens (5♂) from Anamur (South Turkey), fore-wing of the male carries three median dots. However, the number of the dots seems variable. The male genitalia (GP3263) resembles in some respects to *nomadana*, and in others to *blandana*. Neither *nomadana*, nor *blandana*, DNA barcode has been hitherto made. This unclear situation made us believe that our example would not belong to one of the mentioned species. Therefore, its specific identification remains unsolved for the time being.

### **4. *Cochylimorpha* aff. *kurdistan* (Amsel, 1959) (Figs. 4,5)**

Synonymy: *kurdistan* Amsel, 1959

Original Reference: *Euxanthia kurdistan* Amsel, 1959, Bull. Soc. ent. Egypte 43: 57, t.10, fig.7, t.11 fig.2. Holotype ♂: Iraq: Haji Omran (LNK).

Range (as code): TR IQ Hjo Shq IR Kd Bne Sqq Lo Th 31 ?65 31M ?65N ?65Np2 ?65Nm

<sup>2</sup> The correct reference to this name is as follows: *Cochylis punctulatana* Kennel, 1899, *Dt. ent. Z., Iris* 12: 38, pl.1 fig.36 (illustration of the type). Type: Lebanon: Beirut. Razowski (1970, 2009) gave the reference to this species incorrectly, namely as "*Cochylis punctulatana* Kennel, 1900, *Dt. ent. Z., Iris* 13: 38, pl.1 fig.36.

Material studied: 6♂. Van Province, Tuşba, Gören Mt., Ağartı 1950m (65Np2), 27.vi.2014, M. Keml & A.Koçak leg. (Cesa).

Remarks: This species was described by Amsel (1959) from northern Iraq. Razowski (1970: Taf.48 fig.74) illustrated the male genitalia from Akbes (S. Turkey). Alipanah (2009: 11) stated: "There is some phenotypic variation in this species: the ground colour of the forewing varies from cream and yellowish cream (with some rust-colour spots) to greyish cream;...". The identity of this cream-coloured species is temporary.

### 5. *Cochylimorpha langeana* (Kalchberg, 1897)

Synonymy: *langeana* Kalchberg, 1897; *anticyphas* Meyrick, 1936; *hannemanni* Razowski, 1961

Original Reference: *Conchylis langeana* Kalchberg, 1897, Dt. ent. Z., Iris 10: 188. Lectotype ♀: "Haifa, Syria", designated by Razowski, 1970 (NHMW).

Range (as code): IL Hf Jt Pa TR LB Bmm IR Th o6 13 30 31 44 46 65 71 o6F 13F 13F25 30B 30Bt1 30Bz 30D 30Df 31M 44E 44Ei 46D 46Dc 47D 47Da 65A 65Am4 65D 65Df 65Dh 65K 65Kv 65Kl6 65Z 65N 65Np7 65Np8 65Nm

Material studied: 2♀. Van Province, Çatak 2km. NNE 1500m (65Dh) 5.x.2001, M. Kemal & A.Koçak leg. - 2 ex. From same province, Tutumlu Karaağaç 1685m (65Kv), 28.ix.2013, M. Kemal & A.Koçak leg. - 1♂ (GP2173). From same province, Tuşba, Ağartı Yalak 1875m (65Np8), 21.ix.2015, M. Kemal & A.Koçak leg. - 1♂. From same province, Tuşba, Ağartı Gölet 1855m (65Np7), 21.ix.2015, M. Kemal & A.Koçak leg. - 1♂ (GP2397). From same province, Çatak, Saklıvadi 2030m (65Df), 8.ix.2016, A.Koçak leg. - 1♂. From same place, 8.x.2016, M. Kemal & A.Koçak leg. - 1♂ (GP2688), 2♀. From same province, Bahcesaray Upper Mukus Valley 1840m (65Am4), 3.x.2016, M. Kemal & A.Koçak leg. - 1♂. From same province, Erek Mt. 2135m (65Kl6), 4.ix.2018, M. Kemal & A.Koçak leg. - 2♂. Hakkari Province, Zap Valley, Sulphur Valley 1620m (30Bt1), 6.x.2016, M. Kemal & A.Koçak leg. - 1 ex. Hakkari Province, Yüksekova, Dağlıca 1515m (30Df) 22.ix.2017, Hanife Uçak leg. - 2♂2♀. Bitlis Province, Mutki, Koyunlu 1630m (13F25), 14.ix.2018, M. Kemal & A.Koçak leg. - 1♂. Malatya Province, Darende, Beybağı 1.6km N. 1200m (44Ei), 25.v.2017, A.Koçak leg. - 2♂. Mardin Province, Artuklu, Akreşta Pass 1150m (47Da), 13.v.2017, M. Kemal & A.Koçak leg. - 2♂. Kahramanmaraş Province, Elbistan, Şar Mt. 1325m (46Dc), 15.ix.2019, M. Kemal & A.Koçak leg. (Cesa).

Remarks: Morphologically, it is not easy to discriminate *langeana* Kalchberg and *diana* Kennel. No DNA barcode of the mentioned species has been made so far. According to the present information, this species may be new for the fauna of the provinces Bitlis, Hakkari, Malatya, Kahramanmaraş and Mardin.



**Figs. 4,5** - *Cochylimorpha* aff. *kurdistan*. Male genitalia (GP2177) and upperside of the male. East Turkey, Van Province, Tuşba, Gören Mt., Ağartı. M. Kemal (Cesa).

### 6. *Cochylimorpha straminea* (Haworth, [1811])

Synonymy: *straminea* Haworth, [1811]; *tischerana* Treitschke, 1830; *sudana* Duponchel, 1836; *substraminea* Ragonot, 1895; *scabiosa* Kennel, 1900; *lentiginosana* Kennel, 1900; *ramessana* Rebel, 1912; *numidana* Turati, 1924; *glaisana* Lucas, 1942; *pallens* Lucas, 1954

Original Reference: *Tortrix straminea* Haworth, [1811], Lepid. Br. 3: 401. Type: Great Britain.



Range (as code): Cn MA Ifr DZ Bsk Lbs Anna TN Gf Sfx LY Cy PT ES FR Co Sa Si IT MT IE GB BE NL DE CH AT PL CZ SK HU RO YU AL BG GR TR CY IR Elb Mz Kdj Clu Ak Mrd Ar Km DK SE LT RU Pt Ur MD UA BY IL Pa Hf Js LB IQ Shq Hjo SY Dms Cc AM Eri AZ Len TM KG Uk 01 05 06 16 31 33 35 42 46 47 65 76 01E 01Ea 05A 16A 31M 42B 42R 47D 47Da 65A 65Abc 65Am 65Am4 ?65Kl6 ?65Z 76C

Material studied: 1♂ (GP2363). East Turkey: Van Province, Bahçesaray, Upper Mukus Valley 1840m (65Am4), 10.vi.2016, M. Kemal & A.Koçak leg. - 1♂. Bahçesaray Krapet Pass 3000m (65Abc), 16.vii.2017, M. Kemal & A.Koçak leg. - ?1♂. Van Province: Erek Mt. 2135m (65Kl6, 65Z), 4.ix.2018, M. Kemal & A.Koçak leg. - 3♂(GP2828). Mardin Province, Akreşta Pass 1150m (47Da), 13.v.2017, M. Kemal & A.Koçak leg. (Cesa).

Remarks: This record is new for the fauna of Mardin Province.

## 7. *Cochylis epilinana* Duponchel, [1843]

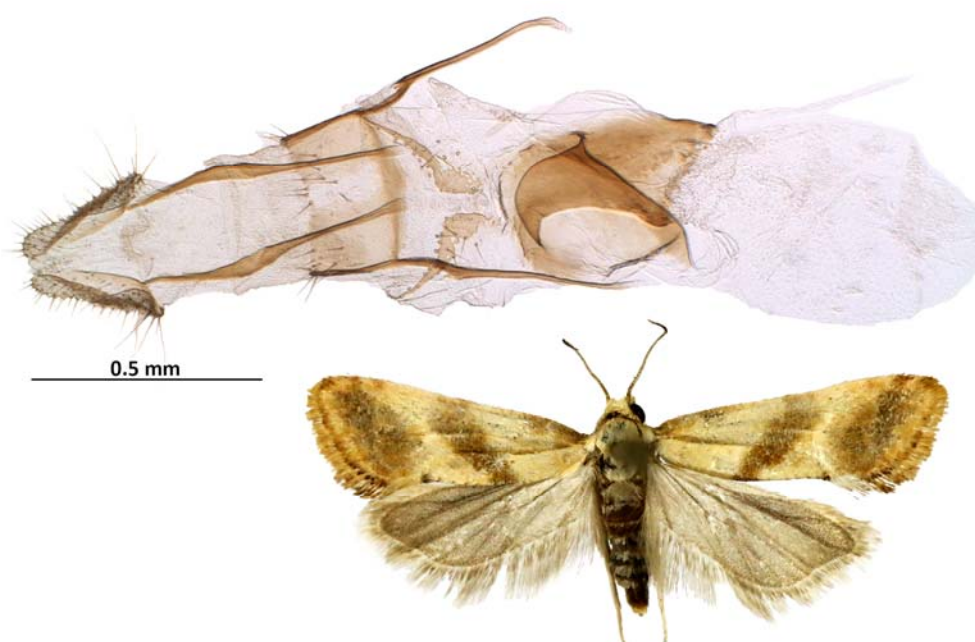
(Figs. 6, 7)

Synonymy: *epilinana* Duponchel, [1843]; *#epiliana* Duponchel, [1843]; *carpophilana* Staudinger, 1859

Original reference: *Cochylis epilinana* Duponchel, [1843], Hist. nat. lépid. France, Supplement 4: 177-178, pl.65 fig.5. Type: France (MNHN).

Range (as code): MA Cn ES An Grn Mu FR Co Sa Si IT BE DE CH AT PL CZ SK HU RO YU MK AL BG GR TR SY Hal IL Hf Pa DK SE FI EE LV LT RU Ur Cc UA 06 38 42 44 51 71 06R 06Ra 42B 44E 44Ei 51B

Remarks: This species was not reported by the authors from Malatya Province (Kemal & Koçak, 2018; ; Koçak & Kemal, 2018: 341). The present record is new for the fauna of Malatya Province.



**Figs. 6, 7 - *Cochylis epilinana*.** Female genitalia (GP2836), and upperside of the female. East Turkey, Malatya Province, Darende, Beybağı. M. Kemal (Cesa).

## 8. *Fulvoclysia* spp.

Remarks: There are several species of this genus occurring in Turkey. Among them, the following species are related with the present species under discussion: *pallorana* Lederer, 1864<sup>3</sup>; *subdolana* Kennel, 1901; *albertii* Razowski, 1983; *rjabovi* Kuznetsov, 1976; *forsteri* Osthelder, 1939. These species are discriminated from each other rather well, basing upon the male genitalia (Razowski, 2009: pl.17, figs. 184-188). In the male genitalia of our specimens, belongs to *subdolana*, the cornuti number varies from 1 to 3, and the “bunch of spines of disc” differently located. Colouration of the fore-wing varies also to some degree. All of these are considered here as individual variations, because of the male genitalia made by us are rather similar to each other (GP971, GP1220, GP2254, GP2261, GP3288).

<sup>3</sup> “*Conchylis pallorana*” was described by Lederer in 1864 on a single specimen from “Imeretien und Grusien”. Razowski (2009) mentioned its type locality as “Turkey: Asia minor: Karaman” on page 60. This information is completely incorrect. “Karaman” has nothing to do with the collecting territory of *pallorana* in “Imeretien und Grusien”. Razowski (2009: 146, pl.17 fig.184) mentioned the type of *pallorana* as “holotype, Caucasus, MNHB”. This seems more reasonable, but the “holotype” definition for Lederer’s material in 1864 is also incorrect.

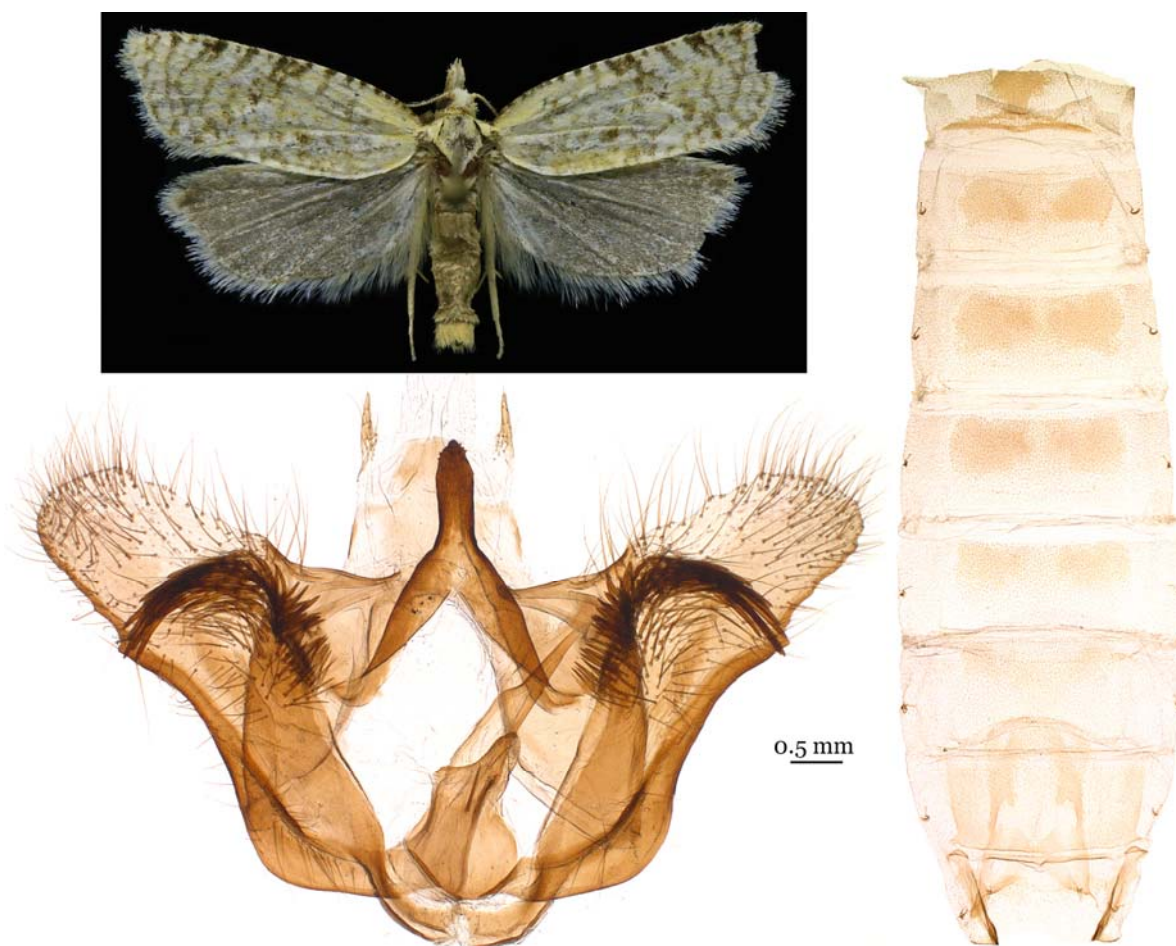
***Fulvoclysia subdolana* (Kennel,1901)****(Figs. 8-10)**Synonymy: *subdolana* Kennel,1901; *subflavana* Amsel,1959Original Reference: *Euxanthis subdolana* Kennel,1901, Dt. ent. Z., Iris 13 (1900): 240-241.

Type ♂: [Türkei]: [Adana Prov.]: "Hadjin" (ZMB).

Range (as code): SY TR Cc IQ Hjo IR Kd Bne Ab Oru Ak Qz 01 30 44 46 51 65 73 75 76 01K 01L 01Lf 30B 30Bt1 30Bz 30D 30Dp 44F 44Fa 46G 46L 51B 51Bc 65K 65Kl 65Z 65N 65Np2 65Nr2 65Nm 73C 73Cd 75F 75Fb 75Fd 76C

Material studied: 2♂ (GP2254, GP2261). SE Turkey, **Hakkari** Province, Yüksekova, Kamışlı 2000m (30Dp) 19.vii.2003, M. Kemal & A.Koçak leg. – 5♂(orange-yellowish form) + 1♂ (yellowish-grey form, GP3288). Hakkari Province, Sulphur Valley 1620m (30Bt1), 18.vi.2018; 12♂. From same place, 8.vii.2018, M.Kemal & A.Koçak leg. - 4♂. NW Turkey, **Ardahan** Province, Posof 1460m (75Fb), 12.vii.2007; 1♂. Posof 1480m (75Fd), 12.viii.2007, M. Kemal & A.Koçak leg. – 3♂. East Turkey, **Van** Province, Tuşba, Gören Mt. (Irerini), Ağartı 1950m (65Np2), 27.vi.2014, M. Kemal & A.Koçak leg.; 1♂. From same place, 21.vi.2014, A.Koçak leg. – 4♂. Irerini Mt. 2030m (65Nr2), 1.vii.2014, M. Kemal & A.Koçak leg. - 5♂. South Turkey, **Adana** Province, Tufanbeyli, Pınarlar 1380m (01Lf), 23.vii.2019, M. Kemal & A.Koçak leg. (Cesa).

Remarks: After evaluating the present records faunistically, this species is new for the fauna of Ardahan Province. The provinces found *subdolana* are as follows: Adana (01), Hakkari (30), Malatya (44), Kahramanmaraş (46), Niğde (51), Van (65), Şırnak (73), Ardahan (75), Iğdır (76).



**Figs. 8 -10** – *Fulvoclysia subdolana*. Upperside of male (wingspan 26mm), its genitalia (GP3288) and abdominal skin. SE Turkey, Hakkari Province, Zap Valley, Sulphur valley. M. Kemal (Cesa).

***Eugnosta* sp.**

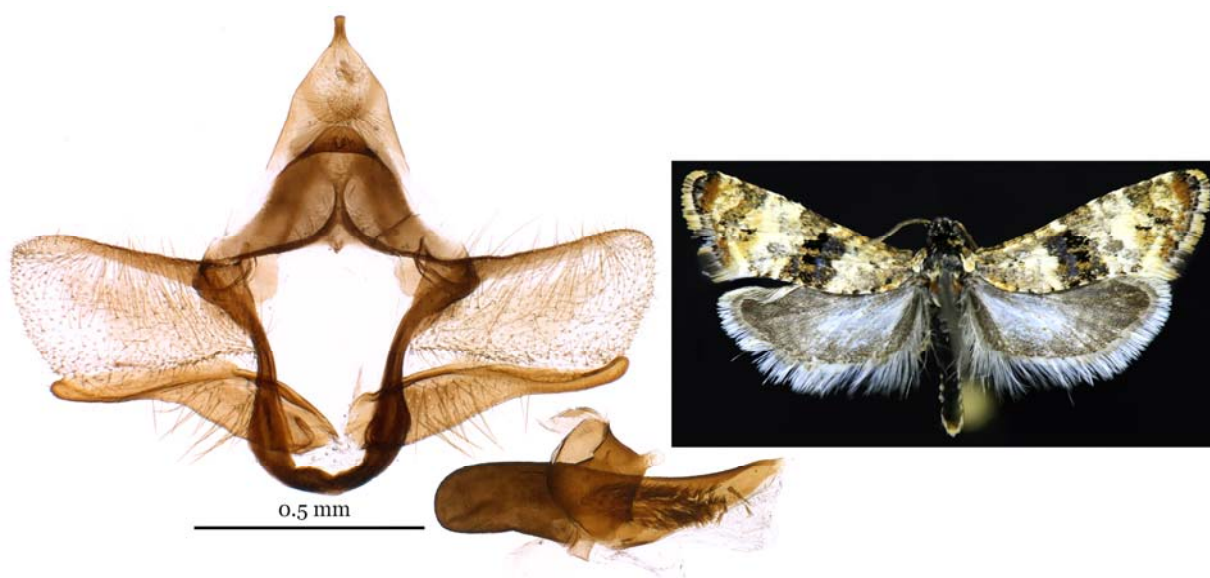
Remarks: A single male, captured from Malatya, looks like to *Eugnosta lathoniana* to some degree. But it differs from it by small size of wings (wingspan 16mm) and male genitalia. The species of *Eugnosta* in the Cesa Collection will be separately studied.

**9. *Hysterophora maculosana* (Haworth,[1811])****(Figs. 11, 12)**Synonymy: *maculosana* Haworth,[1811]; *purgatana* Treitschke,1835; *porculana* Mann,1862.Original Reference: *Tortrix maculosana* Haworth,[1811], Lep. Br.: 438. Type(s): England.

Range (as code): PT ES FR Co Sa Si IT IE GB BE DE AT CZ SK HU RO YU HV MK BG GR TR RU MD UA Cm IL Jt Jr Pa 05 16 65 71 05A 16A 65K16 65Z

Material studied: 1♂ (GP3278). East Turkey, Van Province, Erek Mt. 2080m (65K11), 7.vi.2018, M. Kemal &amp; A.Koçak leg. (Cesa).

Remarks: The present information is the easternmost record of the species in the Middle East, new for the fauna of East Turkey and Van Province.



**Figs. 11, 12** - *Hysterophora maculosana*. Male genitalia (GP3278) and upperside of the male. East Turkey, Van Province, Erek Mt. M. Kemal (Cesa).

***Phtheochroa* Stephens**

*Phtheochroa* is one of the genus rich in number of species in Cochylini. It is represented in Turkey by more than 20 species. These are as follows; \**amasiana* (Ragonot), *aureopunctana* (Ragonot), \**chalcantha* (Meyrick), *decipiens* (Walsingham), *dodrantaria* (Razowski), *duponchelana* (Duponchel), *durbonana* (Lhomme), \**imitana* Derra, \**larseni* Huemer, \**lucentana* (Kennel), \**osthelderi* Huemer, \**palpana* (Ragonot), *procerana* (Lederer), *purana* (Guenée), *rugosana* (Hübner), *schreibersiana* (Frölich), \**schreieri* Derra, *sodaliana* (Haworth), *thiana* Staudinger, *unionana* (Kennel). The species marked with \* have been described from Turkey by various authors. Very limited in number of the West Palaearctic species of this genus have been barcoded so far. It seems that there are two undescribed species from East Turkey. They will be separately evaluated in future from morphological standpoint only.

**10. *Phtheochroa amasiana* (Ragonot,1894)****(Figs. 13-15)**Synonymy: *amasiana* Ragonot,1894Original reference: *Conchylis amasiana* Ragonot,1894, Annls Soc. ent. Fr. 63: 189-190. Type ♀: [Turquie: Amasya Province]: "Amasie" (Max Korb) (MNHN).

Range: TR 05 42 46 47 05A 42K 46G 47D 47Da

Material studied: 1♀ (GP642). Turkey, Konya Province, Hadim 1550m (42K), 2.vii.1976, A.Koçak leg. (Cesa).

Remarks: This species is known from Turkey only, and reported here as new records for the fauna of Konya and Mardin Provinces.

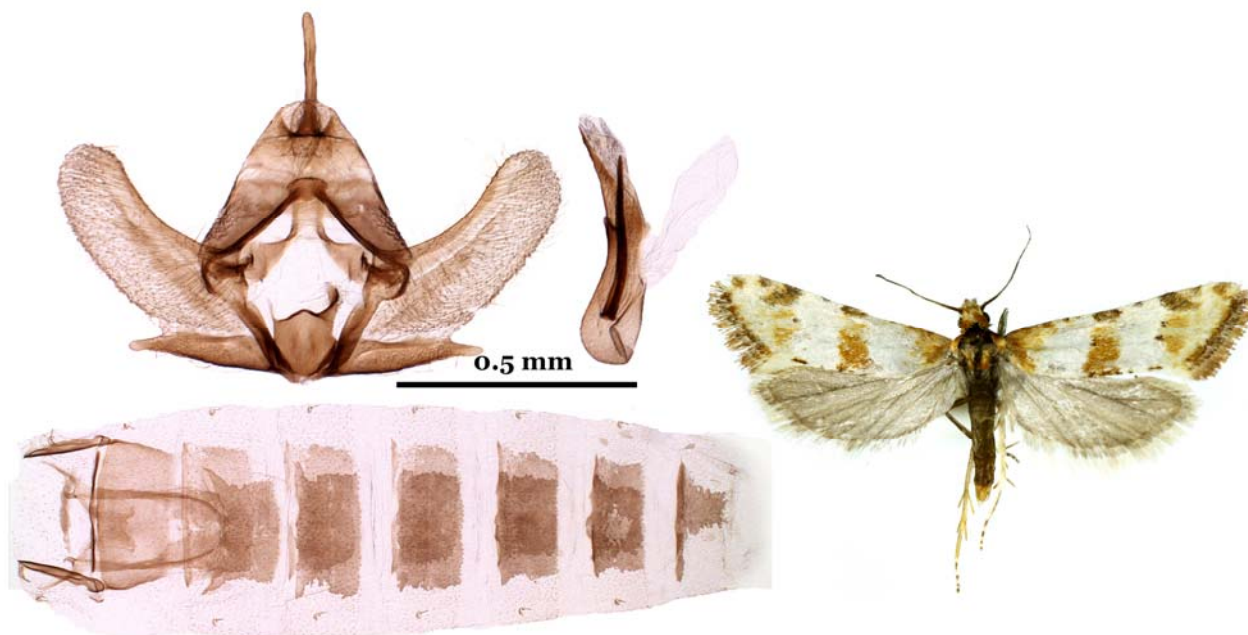


**11. *Phtheochoa chalcantha* (Meyrick, 1912)****(Figs. 16,17)**Synonymy: *chalcantha* Meyrick, 1912Original Reference: *Pharmacis chalcantha* Meyrick, 1912, Exot. Microlepid. 1: 20. Syntypes 3♂♀, Lectotype ♂: [Turkey: Amanos Mts.]: "Asia Minor, Alma Dagh" (BMNH).

Range (as code): TR 31 65 65F 65F 65Fr

Material studied: 1♂ (GP2329). East Turkey, Van Province, Gevaş, Kayalar (65Fr), 10.vi.2005, M.Kemal &amp; A.Koçak leg. (Cesa).

Remarks: The present record is new for the fauna of East Turkey and Van Province.



**Figs. 13 -15 - *Phtheochoa amasiana*.** Male genitalia (GP2830), abdominal skin and upperside of the male. SE Turkey, Mardin Province, Artuklu, Akreştâ Pass. M. Kemal (Cesa).



**Figs. 16, 17 - *Phtheochoa chalcantha*.** Male genitalia (GP2329), socii opened, and upperside of the male. East Turkey, Van Province, Gevaş, Kayalar. M.Kemal (Cesa).





**Figs. 18 – 20 - *Phtheochroa pulvillana*.**- Male genitalia (GP2974), abdominal skin and upperside of the male. SE Turkey, Hakkari Province, Zap Valley, Sulphur valley 1570m. M. Kemal (Cesa).

## 12. *Phtheochroa pulvillana* Herrich-Schäffer, [1851]

(Figs. 18-20)

Synonymy: *pulvillana* Herrich-Schäffer, [1851]

Original reference: *Phtheochroa pulvillana* Herrich-Schäffer, [1851], Syst. Bearb. Schmett. Eur. 4: 195. Type: Germany, Frankfurt a.O.

Range (as code): IT DE AT PL CZ SK HU RO BG YU RU Cc TR IR Mz Gl MD UA Us 3o 3oB 3oBt1 3oBz

Material studied: 4♂. SE Turkey, Hakkari Province, Zap Valley, Sulphur Valley 1620m (3oBt1), 18.vi.2018, M. Kemal & A.Koçak leg. - 1♂ (GP2974). From same place, 1570m, 8.vii.2018, M. Kemal & A.Koçak leg. (Cesa).

Remarks: The present record is new for the fauna of Turkey, therewith for the fauna of Hakkari Province (Koçak & Kemal, 2018; Kemal *et al.*, 2020).

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## On the new records of *Crossotocera wagnerella* in Turkey (Lepidoptera, Oecophoridae)

Muhabbet Kemal<sup>4</sup> Ahmet Ömer Koçak

**Abstract:** On the new records of *Crossotocera wagnerella* in Turkey (Lepidoptera, Oecophoridae).

*Misc. Pap.* 211: 10-12, 4 figs.

In this faunistic paper, occurrence of *Crosotocera wagnerella* in Turkey is evaluated. It is reported here for the first time from four provinces.

**Key words:** *Crossotocera wagnerella*, Lepidoptera, Oecophoridae, fauna, Turkey, male genitalia.

In this short faunistic paper, new collecting materials of this interesting species are evaluated. Zerny (1930) described a new species from Akşehir (Central Anatolia) in a new genus: *Crossotocera wagnerella*. Lvovsky (2002) established separate tribus Crossotocerini for this genus which is currently considered as valid. Two specific names, *monotona* and *tripunctella*, described by Amsel are currently considered as junior synonyms of *wagnerella* Zerny.

The faunistic results are given below:

### ***Crossotocera* Zerny, 1930**

Synonymy: *Crossotocera* Zerny, 1930; *Rhipidocera* Amsel, 1952 nec Agassiz, 1847

Original Reference: *Crossotocera* Zerny, 1930, [in] Wagner, Int. ent. Z. 25 (2): 19-20. Type-species: *Crossotocera wagnerella* Zerny, 1930, by monotypy.

### ***Crossotocera wagnerella* Zerny, 1930**

Synonymy: *wagnerella* Zerny, 1930; *monotona* Amsel, 1942; *tripunctella* Amsel, 1958

Original Reference: *Crossotocera wagnerella* Zerny, 1930, [in] Wagner, Int. ent. Z. 25 (2): 20.

Syntypes 2♂1♀: [Türkei: Konya Province]: “Akschehir” [Akşehir].

Range (as code): RO BG Nsb GR TR CY SY 01 13 42 44 58 65 01L 01Lb 01Lh 01Lk 13A 13Ab 13Ac 13Ac2 13Ax 42B 44E 44Ei 58N 58Nb2 58Nd 65K 65Kl6 65Z 65N

Material studied: 1♂. **Malatya** Province: Darende, Beybağı 1220m, degraded mountain steppe, (44Ei), 25.v.2017, A.Koçak leg. - 3♂. From same place, 30.vii.2017, M.Kemal & A.Koçak leg. - 2♂. **Adana** Province: Tufanbeyli Kan geçidi 1635m, mountain steppe (01Lh), 27.viii.2019, M.Kemal & A.Koçak leg. - 2♂. Tufanbeyli Tozlu 1695m, mountain steppe (01Lb), 28.viii.2019, M.Kemal & A.Koçak leg. - 1♂ (GP3286, and illustration). Tufanbeyli, Güzelim, remnant *Quercus* woodland with steppe plant cover 1450m (01Lk), 29.viii.2019, M.Kemal & A.Koçak leg. - 6♂. **Sivas** Province, Merkez, Taşlıdere 1350m, mountain steppe (58Nb2), 31.viii.2019, M.Kemal & A.Koçak leg. - 4♂. From same Province, Yassıcael 1595m, mountain steppe (58Nd), 31.viii.2019, M.Kemal & A.Koçak leg. (Cesa).

Distribution in Turkey: **Adana** (Tufanbeyli (present material)), **Malatya** (Beybağı (Kemal & Koçak, 2018: 16)), **Sivas** (Merkez) (present material)), **Bitlis** (Süphan Kızdağı 2580m, tragacanthic mountain steppe) (13Ac2) (unpublished record), **Van** Province (Erek Mt., tragacanthic mountain steppe) (65Kl6, 65Z) (unpublished record) <sup>5</sup>.

Habitat: Tragacanthic mountain steppe in Turkey between 1220-2580m above sea level.

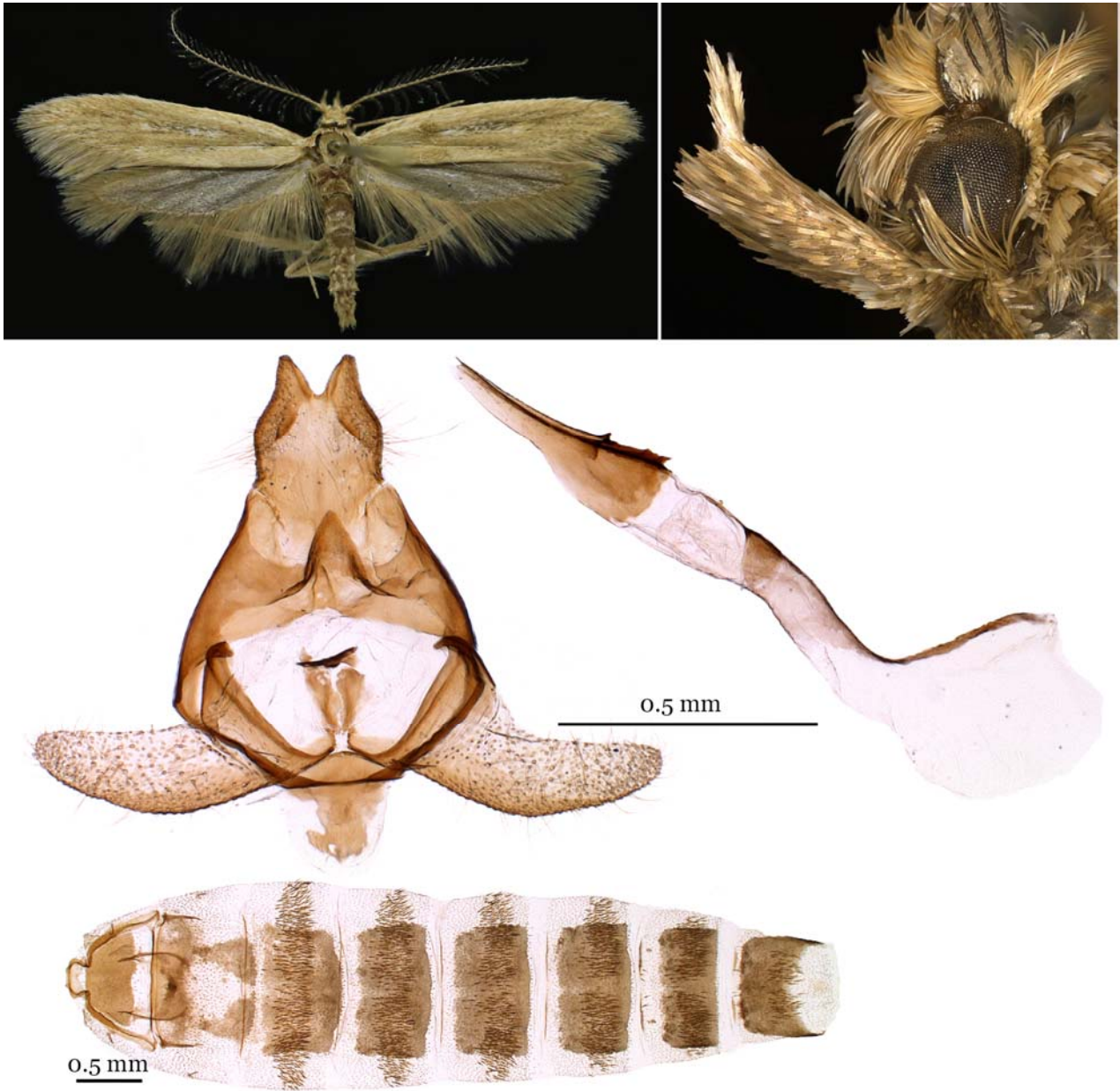
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<sup>5</sup> Malatya, Bitlis and Van records are based on info-system of the Cesa. <http://www.cesa-tr.org/Infos.htm>

We hope that this very troubled process, we are experiencing due to the coronavirus pandemic, is over as soon as possible. After this pandemic is finished in the world, we may turn to our normal life and studies.

Remarks: Faunal information given here are based on the new material and info-system of the Cesa. This species is new for the fauna of Adana, Sivas, Bitlis and Van Provinces.



**Figs. 1-4** - *Crossotocera wagnerella* . Upperside of the adult, lateral view of the head (proboscis absent), its genitalia (GP3286♂♂) removed aedeagus and abdominal skin. Adana Province, Tufanbeyli Güzelim. M. Kemal (Cesa).



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## Description of a new species of *Thiodia* from East Turkey (Lepidoptera, Tortricidae, Olethreutinae)

Muhabbet Kemal<sup>6</sup> Ahmet Ömer Koçak

**Abstract:** Description of a new species of *Thiodia* from East Turkey (Lepidoptera, Tortricidae, Olethreutinae). *Misc. Pap.* 211: 13-14, 3 figs.

In this paper, a new species in the genus *Thiodia* is described and illustrated from East Turkey.

**Key words:** *Thiodia*, Lepidoptera, Tortricidae, Olethreutinae, new species, taxonomy, morphology, genitalia, fauna, Turkey, Adiyaman.

In this paper, a new species of *Thiodia* Hübner, [1825] is described from Adiyaman Province (East Turkey). About this species no information was published previously (Kemal & Koçak, 2018). In the Bold Systems the barcodes of three species of *Thiodia* are accessible only. The DNA analysis of the species of *Thiodia*, living in Turkey should be made (Kemal *et al.*, 2020: 156-157). The genus *Thiodia* is one of little known group in Turkey. It is represented by *anatoliana* Kennel (from Konya, Van), *caradjana* Kennel (from Van), *citrana* Hbn (from Adana, Amasya, Bitlis, Bursa, Van, Ardahan), *couleruana* Dup. (from Afyon, Ankara, Van), *fessana* Mann (from Amasya, İçel), *torridana* Lederer (Ardahan), *trochilana* Frölich (from Amasya, Bursa, Malatya, Van). The present species is near to *citrana*, however, it differs from it by external characters and also by the male genitalia. Its description is given below:

### *Thiodia uyghurica* sp. n.

(Figs. 1-3)

<http://zoobank.org/NomenclaturalActs/352A40A1-E209-467B-AF2D-D48A7616A6E0>

#### Description

Holotype ♂. Fore-wing: 9 mm., wingspan: 19 mm.

Head and thorax covered by light greyish scales. Antenna filiform. Legs lightly chequered. Abdomen darker, except terminal segments. Fore-wing triangular. Upperside ground colouration light olive tinted grey with darker numerous irregular markings with the same hue. No transversal and apical band developed. Hind-wing dark grey, without marking. Ciliae light grey, unicolourous. Underside of fore-wing almost blackish. Hind-wing dark grey.

Male genitalia (GP3289). Uncus very short, socii moderate. Ventral edge of sacculus curved. Neck of valva narrow. Aedeagus well chitinized, curved, with terminal carina, without cornutus (Fig.2).

This new species is nearer to *T. citrana* Hbn but differs from it (incl. *libanicolana* Obraztsov, 1964) by the quiet different fore-wing markings externally, four important structural differences on the valva (marked, fig.2), and the shape of aedeagus. New species is also different from all known *Thiodia* species in the West Palaearctic Region.

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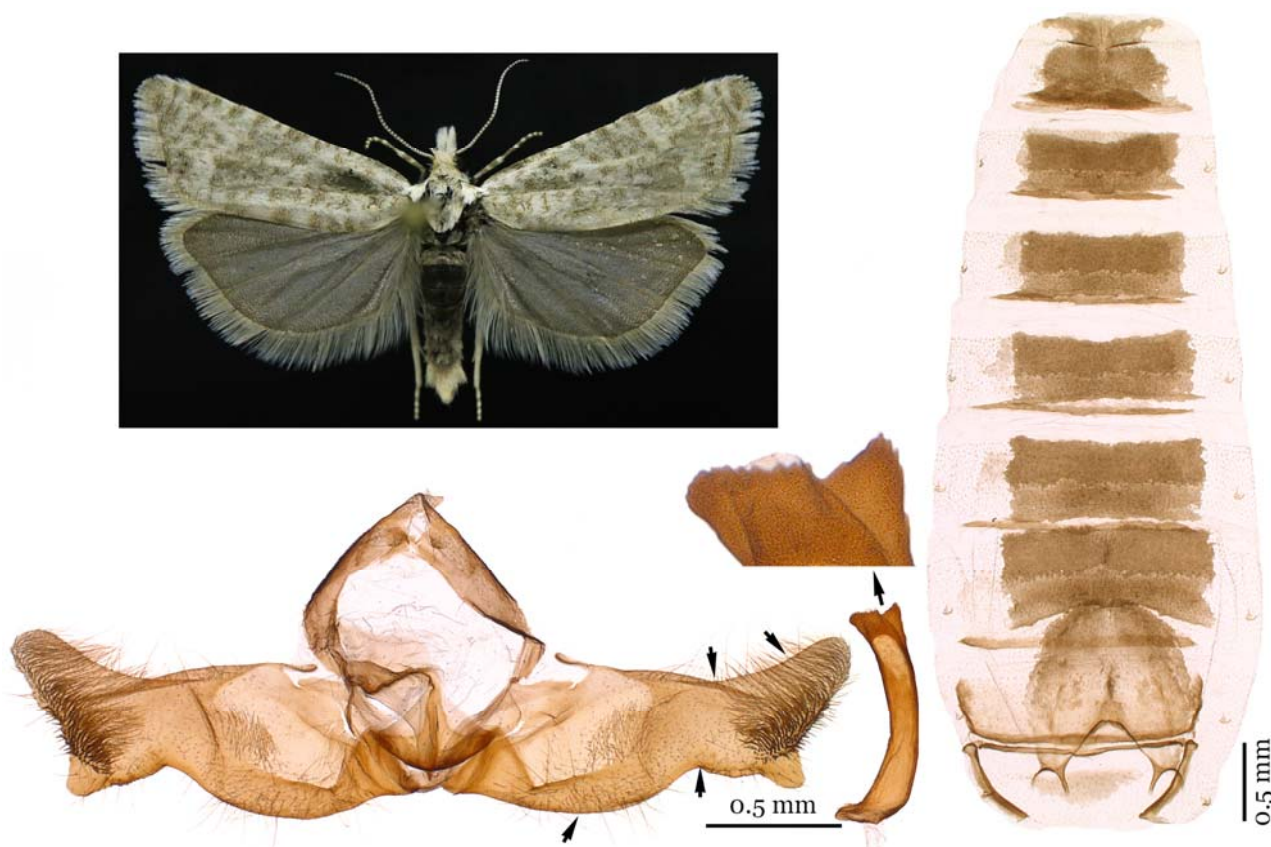
e-mail: [cesa\\_tr@yahoo.com.tr](mailto:cesa_tr@yahoo.com.tr)

We hope that this very troubled process, we are experiencing due to the coronavirus pandemic, is over as soon as possible. After this pandemic is finished in the world, we may turn to our normal life and studies.

Type-series: Holotype (male). East Turkey, Adıyaman Province, Kahta, Nemrut Mt. 1480m, 6.v.2018, M. Kemal & A. Koçak leg. (coll. Cesa).

Female: Unknown.

Etymology: Eretnids was an Anatolian beylik that ruled in a large region extending between Kayseri, Malatya, Adıyaman, Sivas and Amasia in Central Anatolia between 1327 and 1381. The dynasty was founded by Eretna, an officer of Uyghur. The name of this new species is therefore dedicated (cf. Koçak & Kemal, 2007).



**Figs. 1-3** – *Thiodia uyghurica* **sp.n.** Holotype (♂). Upperside of male, genitalia (GP3289), separated aedeagus with enlarged terminal part, and abdominal skin. M. Kemal (Cesa).

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